AMENDMENTS TO THE CLAIMS:

Please cancel claim 2, without prejudice. Kindly amend claim 1, as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (currently amended): A method for avoiding excessive overhead by a programmed computer while using a form of SSA (Static ~~Singe~~ Single Assignment) extended to use storage locations other than local variables, comprising the ~~step~~ steps of:

~~allowing a program to use a~~ using an SSA form compiler representation ~~known as SSA form on any~~ on a non-local memory location addressable by ~~the program; SSA form is normally only usable on function local variables.~~ a function;

inserting phi functions at any place in the function where multiple definitions of a same non-SSA variable may be merged, the phi-functions producing a new definition of the variable at a point where they are inserted;

determining the operations of said function that have the potential to implicitly read or write complex variables that are in SSA form, and for said operations, generating a list of said complex variables and said potential reads or writes;

adding, based on said generated list, write-back copy operations at appropriate locations to write said complex variables that are in SSA form, the write-back copy operations writing an SSA variable back to its real location;

adding, based on said generated list, read-back copy operations at appropriate locations to read values that were potentially modified back into new SSA definitions, the read-back copy operations defining a new SSA variable from a variable's real location; and

<u>replacing every non-SSA variable definition by a definition of a unique SSA variable,</u>

<u>and replacing every non-SSA variable reference by a reference to an appropriate SSA variable</u>.

Claim 2 (canceled)